CIRCULAR H. S. 7
4000—April 1947 (B3)

ONTARIO

Department of Education

Courses of Study

Grades IX, X, XI and XII

SOCIAL STUDIES

GEOGRAPHY

Reprinted without change from Circular H.S. 7 printed May, 1943, June, 1945, and September, 1945.

Issued by Authority of
The Minister of Education

COURSES OF STUDY

For

Grades IX and X

In

Collegiate Institutes, High, Vocational and Continuation Schools, and Public and Separate Schools

And For

Grades XI and XII

In

Collegiate Institutes, High and Continuation Schools

GEOGRAPHY

I. Aims.

1. The acquisition of knowledge and skill
   (a) To gain an understanding of the essential facts of (1) physical environment, (2) social activities of people, (3) their reciprocal relations.
   (b) To develop skill in interpreting geographical facts.
2. The development of certain attitudes.
   (a) An appreciation of regional relationships.
   (b) An interest in social problems.
   (c) A sympathetic understanding of other peoples.

II. Content.

Modern geography may be divided into two main parts: (1) physical geography, which includes the study of structure, relief, drainage, soil, climate, and plant and animal life; and (2) social geography, which includes the study of cultural factors such as race, language, religion, nationalities and occupations. It is the chief function of geography to relate these parts. This two-fold aspect of the subject gives geography an important place in the curriculum, that of a balance between the sciences on the one hand and the humanities on the other.

Regional Geography.

The world is to be studied in broad outline on a regional basis. The order in which the continents have been selected for the several grades has been determined by the need for correlation with the history courses and by the difficulty which the study of each continent presents. The approach is, in the main, from the easier to the more difficult. The study of Canada

has been placed in Grade X for the further reason that pupils who may leave school at the end of this grade may not miss the opportunity of gaining an adequate knowledge of the geography of their own country. Each continent is subdivided into regions selected on the physical bases of structure, relief and climate. The study of a region includes a vivid and accurate description of its physical features and of the characteristics and activities of the people. The interrelations of these three elements, "place, folk and work," should be frequently emphasized.

Regional geography would be incomplete if it did not present a picture of the earth as a coherent whole. The term, "The Continent," is used in each course to mean a synthesis of its regions. The Grade XI course concludes with a general survey of the world through a study of its major geographical regions.

ECONOMIC GEOGRAPHY.

Economic geography deals with the occupations of people in relation to physical environment. This course logically follows the study of regional geography.

III. Procedure.

The place of geography in the school curriculum will be determined largely by the method in which the subject is presented. The outline of the courses is an arrangement of the content, and does not necessarily indicate the procedure to be followed. The subject lends itself to a variety of treatment. The oral, experimental and observational methods are in general use. Geography loses effectiveness and interest if generalizations and ideals are presented too early. The teacher should aim to develop exactness and to encourage creative effort from map work; to inspire a feeling of reality from a study of the local region; and to give a sense of toleration and appreciation by a comparative study of conditions and peoples in other lands.

The geography courses in each year must be supplemented by practical work to be done by the pupils. This will include observations in the local region (1) of the physical elements, such as landscape, weather and seasonal changes, and (2) of the cultural patterns, such as types and distribution of buildings, the location of industries, transport systems, and agricultural crops.

In the later grades this work should be increasingly related to mathematics, science and history. Supplementary reading from travel and exploration, and from books containing descriptions from original sources, will greatly stimulate an interest in the subject.

Care should be taken to select for study only essential facts. The emphasis is not upon the accumulation of facts, but upon their interrelations. The present relationships should be viewed as part of a continuous evolution and as ever changing in their meaning to man. Since causal relationships are very intricate, the teacher should not attempt to explain all of them.

In the senior classes, the teacher should guide and supervise the work of his pupils, rather than instruct them. The pupil should be taught so

that at the end of his school course his interest will continue in a less formal way, and he will know how to search for geographical facts and to apply his knowledge of them.

MAPS.

The map is the most distinctive symbol of geography. It is a tool used for expressing and interpreting geographical facts and relationships. The study of maps and map-reading should be started early in Grade IX, using first the globe, then the large-scale topographic map of the local area, and finally the small-scale map in the atlas. The meaning of contour lines and of map scales should be given special attention. When contours and isotherms are introduced, a notion of area should precede that of boundary. Only when pupils can visualize the reality represented by map symbols does the atlas become a useful book. Each pupil should own a good physical atlas, which should be used in each topic. Wall maps will supplement this atlas. Pupils should be able to fill in outline maps correctly, to draw sketch maps to illustrate special points, and to construct transverse sections. A convenient method of drawing good outline maps on the blackboard is to trace them from projections thrown from a cellophane slide in a lantern. Pupils' outline maps may be readily obtained by means of a rubber stamp.

NOTE-BOOK.

The note-book should contain mainly sketch maps, graphs and diagrams. The use by the pupils of specially designed note-books is not recommended. A note-book should be a permanent record of the pupil's work, useful both for study and for reference.

TEXT-BOOK.

In the lower grades it is advisable to dispense with a text-book, but a supply of several different readers should be available, one for each pupil. The text-book or reader should be used as an aid to teaching.

VISUAL AIDS.

Well-selected pictures are one of the best aids in the study of geography. They should present to the pupil the reality of the world outside the classroom. The detailed picture or lantern-slide is best for descriptive and critical analysis, while a series of pictures or a film is more suitable for synthesis. Specimens and samples should also be collected for classroom study. Relief models may be constructed of cardboard layers traced from contour maps.

REGIONAL GEOGRAPHY.

After the region has been located the physical and cultural elements are discovered from atlases, class-books and reference books. These are indicated on an outline map by a variety of techniques, and then relationships are studied. With junior pupils it is better to plot only a few facts on a single map. The map is developed on the blackboard and left for several lessons so that the pupil can compare his own map with it. Supplementary notes and drawings will be required, to explain physical and cultural phenomena. A good atlas will be required having large-scale maps of important regions. The study of the topic will be amplified by

pictures, samples, local observations, and outside reading. After several regions have been studied, the continent will be considered as a whole in order to relate the different areas. This regional synthesis will require the use of continental maps.

IV. Geography Room and Equipment.

Where possible a geography classroom should be provided, preferably with a southern exposure. It should be equipped with wall maps, a globe, a tracing table, a display board, a storage cupboard and display cabinets. A library, containing a few copies of each of several readers and single copies of general reference texts, should also be located in this room. It is preferable to have some means of showing pictures, such as a projection lantern, a film projector, or a reflecting lantern.

NOTE:—In the list of books those that are marked with an asterisk are specially recommended.

Grade IX—General and Vocational Course

REGIONAL GEOGRAPHY

AFRICA, AUSTRALASIA, BRITISH ISLES

NOTE:—In Vocational Schools teachers may substitute the Grade X General Course on North America for the Grade IX General Course on Africa, and may make such reductions in the details of the courses as will result in a year's course approximately equal to the Grade IX course below.

Introduction and Practical Work

The course begins with a brief review of the general geography of the earth. The pupil should be made familiar with simple map-work and graphs and with methods of observing local phenomena. They should be taught elementary ideas of map projections, their advantages and limitations. This work is to be started early in the course and then continued along with the Regional Geography.

1. The school globe—(a) as representing the earth in shape and size; (b) as a world map indicating distance, direction, shape, area; scale, latitude, longitude, time.

2. The local map—topographic map (1 mile to 1 inch): scale, conventional signs, relief, contour lines, elementary map reading.

3. Observations—(a) a few geographic features of the local area; (b) sun-shadows to show seasons, north-south line, time, latitude; (c) weather; (d) local occupations and industries; (e) travel and transportation.

4. The atlas map—comparison with globe map and with large-scale maps.

References.

*Orford: Senior Practical Geography (pupil's book)—University of London Press (Clarke, Irwin) $0.70

*Pickles: Map Reading—Dent ..... .50

Sweeting: Experimental Geography—Copp Clark ..... .40

*Topographic Maps: Hydrographic and Map Service, Dept. of Mines and Resources, Ottawa.

AFRICA

The geography of Africa is based largely on the structure of the land and on the tropical position of the continent. The relation of European settlement and control to the negro population is important.

1. A review of the continent with regard to early civilization, discoveries and explorations.

2. Regions—select one region from each of the following for detailed study.

   (a) The desert and its margins: Sahara; Nile Lands; Barbary States; Eastern Horn.

   (b) Equatorial Africa: Guinea Coast and Niger; Congo Basin; East Africa.

   (c) The Southern Plateau: Union of South Africa; West Africa; Northern and Southern Rhodesia.

3. The continent.

   (a) Relation of drainage to structure and relief.

   (b) Climate: seasonal distribution of rainfall.

   (c) Vegetation and animal life: climatic control.

   (d) People: native races; immigrants.

   (e) Transportation.

   (f) Products: relation to rainfall and to structure.

   (g) Political divisions: European control.

References for the Teacher.

Alnwick: A Geography of Africa—Harrap (Clarke, Irwin) $1.35

Gregory: Africa; A Geographical Reader—Rand McNally (Gage) 1.50

*Suggate: Africa—Harrap (Clarke, Irwin) 2.25

*Fitzgerald: Africa—Methuen 16/–

AUSTRALASIA

Australia, New Zealand, and a few neighbouring islands. These regions are isolated from land masses and trade routes.

1. A review of (a) causes of late discovery, (b) early settlements and explorations.
2. Regions—a detailed study of South-east Australia, and any two of the following: Tasmania; Queensland, The Western Tableland (south-west coast, desert interior); New Zealand; Island Groups.
3. The continent.
   - (a) Industries—relation to physical geography; rainfall, artesian water.
   - (b) Transportation.
   - (c) Population: urban concentration, "white Australia" policy.
   - (d) Comparison of South Africa and Australia: physical geography; people; work.

References for the Teacher.

Taylor: Australia — A Geography Reader — Rand McNally (Gage) $1.50

*Suggate: Australia and New Zealand—Harrap (Clarke, Irwin) 2.25

Class Readers (Africa and Australia).

*Geography for To-Day: British Isles, Africa, Australia—Longmans 1.00

Pickles: Africa, Australia, New Zealand—Dent ..... .75

Thurston: Africa and Australia—Arnold ..... .75

THE BRITISH ISLES

A study of the British Isles affords an excellent opportunity to correlate History and Literature with Geography.

1. Historical introduction—a brief study of the geographical factors in relation to the changes from (a) marginal to central world position, (b) agriculture to commerce and manufacturing. Insular security of the British Isles.
2. Regions—select any four regions for detailed study.
   - (a) South-east England and the Thames Basin.
   - (b) The English Midlands.
   - (c) The Welsh and Devonian Peninsulas.

(d) The Central Uplands (Pennines, Lake District, Cheviots, Southern Uplands of Scotland).

(e) The Central Lowlands of Scotland.

(f) The Scottish Highlands.

(g) Ireland.

3. The economic significance of the British Isles in relation to the diversity of its resources, intensity of specialization, navigation (open ports) and access to world products and markets.

(a) Density of population.

(b) Industries: agriculture, fishing, mining, manufacturing.

(c) Transportation.

(d) Trade, commerce and finance: (a) with other parts of the British Empire, (b) with other countries.

References for the Teacher.

*Mackinder: Britain and the British Seas—Oxford $3.00

Dell: The British Isles—Harrap 1.10

Murray: The British Isles—Collins 1.00

Wilmore: Industrial Britain—Harrap 1.75

Readers for the Class.

Fairgrieve and Young: The British Isles—Geo. Philip & Son (Moyer) 1.00

Pickles: Great Britain and Ireland—Dent ..... .75

Grade X—General Course

REGIONAL GEOGRAPHY

NORTH AND SOUTH AMERICA

The purpose of the Grade X course is to give the pupil a general knowledge of South America and a more detailed knowledge of North America. Mexico, Central America and the West Indies are grouped with South America because of the Spanish influence and the tropical conditions in these lands. The economic development and the political growth show marked contrasts in these two continents. This is due largely to the difference in the native peoples, in the climate, and in the Europeans who came to the Americas. The two continents are similar in structure, relief and drainage.

SOUTH AMERICA

(Including Mexico, Central America and West Indies)

I. Discovery of the Americas.

1. A brief review of the discovery of both continents—early maps, navigation and winds.
2. Results of discovery: the ocean became a "way" instead of a barrier; the new route to the East via Cape Horn was too long; European coast traffic became complementary to ocean trade.

II. Plant and Animal Life.

(a) Indigenous; (b) introduced by Europeans.

III. Native Peoples.

(a) Aztecs—Mexican plateau; Mayas—Mexican lowlands and Central America.

(b) Incas—Peru and Bolivia; Plains Indians—South American lowlands.

1V. Exploration and Settlement by Europeans.

1. Spanish conquest of Mexico and Peru; the search for "El Dorado"; settlement along the La Plata.
2. Portuguese: Brazil.
3. French and English: West Indies.
4. The effect on the native peoples: language; religion; race; government; slave trade.
5. The Ten Republics: Bolivar; effect of the Monroe Doctrine.

V. Regions (select one region from each of the following).

1. Argentine and La Plata basin; the northern region; the pampas; Patagonia.
2. Brazil: Amazon basin; the plateau and east coast.
3. The Andes: The Northern States; Peru and Bolivia; Chile.
4. Mexico; Central America; Guianas; West Indies.

VI. The Continent.

1. Physical divisions: western cordillera; central lowlands; eastern plateaus; drainage.

2. Climate.

3. Economic development: mining, agriculture, transportation and trade.

4. Population: density; cities; immigration.

References for the Teacher.

*Jones: South America—Holt **$4.75**

Whitbeck: Economic Geography of South America—McGraw Hill **4.25**

Bowman: South America—A Geography Reader—Rand McNally (Gage) **1.50**

Readers for Pupils.

Pickles: South and Central America—Dent ..... **.65**

*Geography for To-day: South America (in part)—Longmans **.60**

NORTH AMERICA

I. Relief and Drainage.

1. Highlands: west—young fold mountains (cordilleras), volcanoes; east—older fold mountains (Appalachians).

2. Lowlands and river basins: Canadian shield—oldest part of continent (Precambrian), higher in east; great plains of unfolded sedimentary rocks; Mackenzie, St. Lawrence, Mississippi; Ice Age—marginal lakes of Shield, clay belts.

3. Coasts: very irregular; continental shelf—banks.

II. Climate.

1. Temperature: isotherms, hot and cold loops; seasonal changes; continental extremes; seasonal delay; length of summer days; frost-free days.

2. Winds: prevailing wind direction (wind-rose); effect of ocean currents—Gulf Stream, Labrador Current, Japan Current.

3. Precipitation: seasonal changes and distribution; droughts.

4. Weather map: location of weather stations; relations of weather forecasting to agriculture, fishing and transportation.

5. Climatic regions.

III. Plant and Animal Life.

(a) Vegetation: relation to climate and soil; types and distribution—forests, grasslands, deserts.

(b) Animal life: relation to climate; marine life.

IV. Regions.

1. Maritime regions of East Coast: Canadian Maritime Provinces; Newfoundland; New England.
2. Canadian Shield.
3. Appalachians and East Coast.
4. Great Lakes and St. Lawrence Lowlands: Ottawa and lower St. Lawrence; Lake Ontario region; the lake peninsula.
5. Central plains.
   (a) North drainage basin—Canadian prairies; northern forest region.
   (b) South drainage basin—north; central; high west plain; gulf coast.
6. Western Highlands.
   (a) Southern part: mountains and interior plateau; California.
   (b) British Columbia and Columbia Basin; Yukon and Alaska.

V. The Continent.

1. Political divisions.
2. Population: race, density, cities, immigration.
3. Products: fish, fur, tobacco, cotton, lumber, wheat, cattle and dairy products, corn, hogs, citrus fruits, minerals, pulp and paper manufactures, coal, petroleum. These are arranged to show the significance of increasing trade in commodities of low value and increasing bulk, following improvements of transportation.
4. Transportation: water, land, air.

VI. North and South America.

1. Contrasts and comparisons: relief; climate; people; the later development of South America.
2. Relation to other continents: trade, effect of Panama Canal; political—British Empire; Pan-American Union; Orient.

References for the Teacher.

*Bryan and Jones: North America—Methuen..... **22/6**

Smith: North America—Harcourt Brace..... **$4.00**

Books for Pupils.

*Denton and Lord: World Geography for Canadian Schools—Dent. **1.25**

Cornish: The New Canadian School Geography—Dent..... **.90**

Stembridge: North and South America—Oxford $0.85

Canada—Descriptive Atlas—Minister of Mines and Resources, Ottawa ..... .10

Grade X—Vocational Course

ECONOMIC GEOGRAPHY

NOTE:—Throughout the course, the geography of Canada is to be stressed where relevant to the listed topics.

I. Introduction.

1. Interpretation of economic geography and its field; factors of physical environment—climate. topography, etc.; relation of man to physical environment—occupations.

2. Interpretation of wall maps, atlases, and globes; application to study of a few commercial centres such as New York, London, Hamburg, Shanghai, Yokohama, Singapore, Buenos Aires, Vancouver under the following headings: location—latitude and longitude; topography of hinterland; climate—isotherm and isohyet readings; productivity of hinterland—economic map; population of the centre and its hinterland.

II. A General Survey of Basic Geographic Factors.

1. A brief review of the form and motions of the earth.

2. Climatic regions of the earth linked with natural vegetation—map study; a simple classification such as tropical, sub-tropical, temperate, polar, high altitude.

3. Structure and relief: a brief treatment of geological ages—primary, secondary, tertiary, quaternary; faults and igneous intrusions; igneous, sedimentary, and metamorphic rocks; soils—transported, residual; aging of soils by climate; economic implications of structure and relief.

III. Importance of Power to Modern Industrialism.

1. General survey: sun—fundamental source of all energy, future possibilities; earliest power—human, animals; pre-industrial era—wood, wind, water; early industrial era—coal; modern industrial era—electricity, oil.

2. Coal: formation, seams; distribution of coal-fields—North America and Europe (maps); uses in industry, tranportation, and the home; industrial concentration near coal-fields—movement of raw materials, such as iron to coal; trade—ballast

3. Petroleum and natural gas; occurrence—in porous strata; main fields—in contrast with coal areas. mobility and flexibility; transportation—to industrial centres by pipe-lines, tankers, tank-cars; uses—internal combustion engines, steam, domestic; significance—lighting industry, automobiles, aviation, increased range of vessels, Panama Canal, opening of Pacific; conservation.

4. Water power: early importance; relation of power sites to relief and rainfall; water-storage—lakes and forests, dams; hydro-electric development and distribution—non-coal countries, e.g., Canada, Italy, Switzerland, Norway; transmission of electric power; uses—domestic, electro-chemical, electro-metallurgical, electro-motive; significance—possibilities of decentralization of industries and population; nationalism—lack of dependence on coal countries, e.g., Italy, Canada.

IV. Relation of Industrialism to Population Density (map).

1. Western World: influence of power resources; interdependence of nations.

2. Eastern World: influence of soil, topography, climate; self-sufficiency of nations.

V. Significance of Population Density to Transportation and Communication.

1. Transportation—movement of staple products to industrial areas and of manufactured products from industrial areas.
   Water: ocean—types of vessels, routes, Suez and Panama Canals; inland—rivers, lakes, canals of St. Lawrence System.
   Land: highways and roads; railways—coal, oil, electric.
   Air: mail, passenger—Empire air routes; freight—remote mining areas of Canada.

2. Communication—the commercial importance of modern means: telegraph, cable, telephone, radio, postal facilities, newspapers, publications.

VI. Relation of Population Density and Transportation to the Distribution, Production and Trade of Staple and Manufactured Products.

NOTE:—The list of products is suggestive; the basic industries should be stressed and may be supplemented by a study of those of local importance.

A. STAPLE PRODUCTS.

1. Food stuffs:

   (a) Agricultural: temperate—wheat, other cereals, fruits and vegetables, meat, dairy products; tropical and sub-tropical—rice, sugar, fruits, coffee, tea, cacao, tobacco.

(b) Fish: fishing grounds (map); refrigeration and the decline of dried fish trade.

2. Clothing: wool, cotton, silk, flax, hides, skins, furs.

3. Shelter: lumber, stone, brick, cement, asbestos.

B. Manufactured Products.

1. Foods: meat packing—refrigeration; flour milling; sugar refining; canning.

2. Textiles: cottons, woollens, linen, silk, artificial silk; clothing.

3. Metals: iron and steel; precious and base metals—alloys; wire and cables.

4. Transportation units: automobiles and accessories; rolling stock; ships; aeroplanes.

5. Machinery: agricultural implements; generators; plant equipment.

6. Forest: pulp and paper; rubber (plantation); gums and varnishes.

VII. Revision.

A brief regional study of Canada to show her relation to world industries and trade.

GRADE XI—General Course

REGIONAL GEOGRAPHY—EUROPE AND ASIA

The continents of Europe and Asia have many contrasts both in their physical geography and in their civilizations. Although they form one large land mass, intercourse between them is mainly by sea. The numerous peninsulas of Europe and the passes that penetrate its southern mountain barrier have had much to do with its history. Europe and Asia were the cradle of the older civilizations, from which spread people and culture to all the new lands of the world. The population of these two continents is densest on the western and eastern margins—the former being industrial and the latter mainly agricultural. The races of Europe are so intermingled that it is difficult to fix satisfactory national boundaries.

I. Physical Geography of Euro-Asia.

1. Relief and drainage: Scandinavian highlands; the great northern plain; the central mountain barrier; old plateaus of the south (Arabia, Deccan, Yunnan); river valleys; coasts.

2. Climate: effect of winds, ocean currents, and the large land mass on temperature and rainfall; climatic regions.

3. Vegetation: regions.
4. A brief account of early migrations; races; density of population.

II. Regions of Asia.

1. Land of the five seas (South-west Asia).
2. Southern Asia: India; South-east Asia.
3. The Far East.
4. U.S.S.R. (including European part).
5. The continent: (a) contribution of Asia to the world; (b) the changing east; (c) products—tea, rice, silk, cotton, jute, wheat, rubber, gold, tin, manufactures, oil.

III. Regions of Europe (omitting British Isles)

1. Scandinavia and the Baltic States.
2. The European plain.
3. Structural regions of the chief European coalfields.
4. The Rhine basin and Switzerland.
5. France.
6. The Danube lands.
7. The Mediterranean lands: Spain and Portugal; Italy; Greece.
8. The continent (including British Isles).
   (a) Political states and boundaries.
   (b) Industries: agriculture, mining, manufacturing, fishing, forest.
   (c) Trade and transportation: import of raw materials.
   (d) Colonial expansion.

IV. The Major Geographical Regions of the World.

A survey of these regions to show the economic interdependence of the countries of the world.

(a) Hot lands—equatorial, savanna, desert, monsoon.

(b) Warm temperate lands—western margin, central or steppe, eastern margin.

(c) Cool temperate lands—western margin, central or Siberian, eastern margin or Laurentian.

(d) Cold lands.

References for the Teacher.

Stamp: Asia—Methuen	27/6
*Blanchard and Crist: A Geography of Europe—Holt (Clarke, Irwin)	$3.75
Huntington: Asia (a geography reader)—Rand, McNally (Gage)	1.50
Wright: Geographical Basis of European History—Holt	1.00
*Alnwick: A Geography of Europe—Harrap (Clarke, Irwin)	1.20
Pickles: Europe—Dent	1.00

Books for Pupils:

*Fairgrieve and Young: Euro-Asia—Philip (Moyer)	1.25
*Pickles: Europe and Asia—Dent	.75

Grade XII—General Course

ECONOMIC GEOGRAPHY

This course is a study of how man's attempts to adjust himself to his environment are influenced by the available natural resources and his own capacities. It is designed to show the importance in the world economy of the concentration of population, particularly in metropolitan areas. The industrialization of eastern North America and western Europe has resulted in the production of all kinds of commodities and their transportation between these two regions and other parts of the world. The interdependence of the world as an economic unit is stressed throughout the course. The concluding topic, "The Changing Economy," will serve to develop the idea that modern society is in a continual process of economic change and progress.

I. World Population.

A brief survey with suitable map study of density of population and such factors as race, religion, and language.

1. Concentration of population in metropolitan areas, e.g., London, Paris, New York, Montreal, Toronto.
   (a) Geographic factors: climate, location in relation to hinterland, to navigation (North Atlantic basin), and to sources of power—coal, hydro-electric, oil.
   (b) Cultural factors (economic and political): transportation, tariffs, markets, finance.
2. Self-sufficient populations, e.g., India and China; influence of soil and climate.

II. Transporation and Communication.

A. Relation of population to transportation; effect of geographic factors and technology.

1. Water: cheapness, freedom of movement.

(a) Ports and ocean routes (Suez and Panama canals).

(b) Inland waterways; seasonal handicaps.

(c) Steamships: type of ships—liners and tramps, lake carriers, tankers, refrigerator ships; limitations of coal, advantages of oil.

2. Land: expensiveness, speed.

(a) Railroads: heavy and long-distance transport, dependability, rigidity; power used—coal, oil, electricity. Location of the chief railway networks and their seaport terminals as shown on world maps.

(b) Highways—comparative flexibility of traffic. Utilization of the internal combustion engine and of the electric motor in rural or urban transportation; contrast with animal transport.

3. Air: speed.

(a) Dependence upon the development of the internal combustion engine.

(b) Chief routes: mail, passenger and freight routes connecting urban centres; on frontiers—Canada's mining areas.

(c) Airports.

4. Competition and co-operation.

Place of each type of transport in modern economy; comparison as to cost, speed, reliability, flexibility, safety, types of power.

B. Communication.

Telegraph, cable, telephone, radio, postal facilities, newspapers and other publications.

C. Influence of political factors on transportation and communication.

National unity and defense, pioneer development; routes; regulation and rates (subsidies); public and private ownership.

III. Basic Demands of Population.

A. Staple products and their manufacture.

1. Food.

(a) Agriculture.

Cereals—wheat, corn, rice; milling and baking industries.

Meats—cattle, sheep, hogs; packing and refrigeration.
Dairy products.
Fruit and vegetables; methods of preservation.
Beverages—tea, coffee, cocoa.
Sugar—cane and beet; refining.

(b) Fishing.
Salt and fresh-water products; methods of preservation.

2. Clothing.

(a) Wool, leather, fur.
(b) Cotton (cotton-seed), silk, flax (linseed), synthetic fibres.
(c) Textile and clothing industries.

B. Capital goods industries.

A study of the industries which produce the machines or other materials used in the manufacture of goods which are required to meet the demands of consumers.

1. Forest industries: lumber (wood-working industries), pulp and paper, rubber, oils (palm and coconut, turpentine and resins).

2. Mineral industries: base metals—iron, steel, lead, zinc, copper, nickel, aluminium; precious metals; non-metallic minerals—salt, sulphur, clay, asbestos; power minerals—coal. oil; chemical and electro-chemical industry—coal tar and its products, fertilizers.

3. Machine and equipment industries: machine tools; transportation—rolling stock, ships, aeroplanes, automobiles, communication—radio, telephone, printing; farm implements; power—plant and electrical equipment; mining equipment; construction industries.

IV. Trade, Commerce and Finance.

1. Internal and external trade: chief trade routes of the world; chief features of the trade of a few leading nations; tariffs; exchange.

2. Commerce: (a) commodity exchanges—for raw materials; (b) wholesalers, jobbers, department and chain stores—for manufactured products.

3. Finance: banks; bond houses; insurance companies; stock exchanges; world money markets.

V. Canada in the World Economy.

A study of the changes which have taken place in the importance of staple products and in the markets for these. Furs, fish, lumber, wheat, pulp and paper, minerals, and manufactures have successively occupied the most important position in Canada's export trade.

VI. The Changing Economy.

Modern society is essentially dynamic. The significance of geographic factors varies with the state of advancement of the countries concerned. The metropolitan area may be considered as a key to the modern economy.

1. Geographic factors: such as physical features and climate. These factors do not alone determine the location of the production of raw materials or the manufacture and distribution of commodities.

2. Cultural factors: economic systems (self-sufficiency and industrial economy); political systems; health; education; technology.

The local community may be used to illustrate the interdependence of these factors.

Reference Books for Teachers.

The Teaching of Geography.

Methods.

Fairgrieve: Geography in School—University of London Press (Clarke, Irwin & Co., Ltd.) **$2.75**

*Memorandum on the Teaching of Geography—G. Philip & Son (Moyer School Supplies, Ltd.) **2.50**

General.

*Bowman: Geography in Relation to the Social Sciences—Charles Scribners' Sons **2.25**

East: Geography Behind History—Thomas Nelson & Sons, Ltd ..... **.60**

Fairgrieve: Geography and World Power—University of London Press (Clarke, Irwin & Co., Ltd.) **1.50**

Physical.

Shaw: The Drama of Weather—Cambridge University Press (Macmillan Co. of Canada, Ltd.) **3.50**

*Tarr and Von Engeln: New Physical Geography—Macmillan Co. of Canada, Ltd **2.40**

Regional and Human.

Brunhes: Human Geography—Rand McNally Co. (W. J. Gage & Co., Ltd.) **4.00**

*James: An Outline of Geography—Ginn & Co., Toronto **3.25**

*Newbigin: A New Regional Geography of the World — Christophers (McCelland & Stewart, Ltd.) **1.75**

*Stamp: The World—Longmans, Green & Co. $1.80
Taylor: Environment, Race and Migration—University of Toronto Press 3.25

ECONOMIC AND COMMERCIAL.

*Bengtson and Van Royen: Fundamentals of Economic Geography—Prentice-Hall, New York 4.25
*Cudmore: History of the World's Commerce—Sir Isaac Pitman & Sons (Canada), Ltd .80
*Friedrichs: Alfred Weber's Theory of Location of Industry—University of Chicago Press 3.00
*Huntington, Williams, Van Valkenburg: Economic and Social Geography—J. Wiley (Renouf Publishing Co., Toronto) 3.75
*Jones: Economic Geography—Henry Holt & Co. (Clarke, Irwin & Co., Ltd.) 1.85
*Moore: Mineral Resources of Canada—Ryerson Press 2.50
Mulley: The World's Food and Commerce—Longmans, Green & Co. .70
*Pickles: Map Reading—J.M. Dent & Sons (Canada), Ltd .50
*Smith: Industrial and Commercial Geography—Henry Holt & Co. (Clarke, Irwin & Co., Ltd.) 4.75
Steinberg: Banking and Exchange—Sir Isaac Pitman & Sons (Canada), Ltd .75
Steinberg and Hopkins: Evolution and Economics of Transportation—Sir Isaac Pitman & Sons (Canada), Ltd 1.25
*Whitbeck and Finch: Economic Geography—McGraw-Hill Book Co., Inc. (George J. McLeod, Ltd.) 4.25

Atlases for Pupils.

Dent's Canadian School Atlas—J. M. Dent & Sons (Canada), Ltd. .60
Harrap's General School Atlas—George G. Harrap & Co., Ltd. (Clarke, Irwin & Co., Ltd.) .65
Johnston's Advanced Modern School Atlas—Johnston (George M. Hendry Co., Ltd.) 1.25
Philips' Dominion Atlas of Comparative Geography—George Philip & Son (Moyer School Supplies, Ltd.) .45

Library Books.

Atlas of Economic Geography (Edited Bartholomew and Lyde)—Oxford University Press (Clarke, Irwin & Co., Ltd.) 2.50
*Goode's School Atlas—Rand McNally Co. (W. J. Gage & Co., Ltd.) 4.40
Oxford Advanced Atlas—Oxford University Press (Clarke, Irwin & Co., Ltd.) 3.00
*Canada Year Book—Bureau of Statistics, Ottawa .50
Canada—Official Handbook—Bureau of Statistics, Ottawa .10

*Nelson's World Gazetteer—Thomas Nelson & Sons. Ltd **$0.75**

*Whitaker's Almanack (London)—Wm. Dawson Subscription Service, Toronto **1.85**

Alnwick: Commercial Geography—George G. Harrap & Co., Ltd. (Clarke, Irwin & Co., Ltd.) **1.35**

Alnwick: Geography of Commodities—George G. Harrap & Co., Ltd. (Clarke, Irwin & Co., Ltd.) **1.10**

Brooks: The New Regional Geographies (Secondary School Series)—University of London Press (Clarke, Irwin & Co., Ltd.)—

Book I, The Americas, $1.10. (Part 1, North America, 85c.; Part II, Central and South America, 50c.)

Book II, Asia and Australasia, $1.10. (Part I. Asia, 85c.; Part II, Australasia, 50c.)

Book III, Africa and Europe, $1.75. (Part I, Africa, 85c.; Part II, British Isles, 75 c.; Part III, Europe, including the British Isles, $1.35; Part IV, Europe, excluding the British Isles, $1.10.)

Book IV, The World, $2.25.

Brooks and Finch: The Columnus Regional Geographies (Senior Series—University of London Press (Clarke, Irwin & Co., Ltd.)—Sr. I, The Southern Continents, 85c.; Sr. II, North America and Asia, 90c.; Sr. III, British Isles and Europe, $1.10 (also in two parts: Part I, British Isles, 50c.; Part II, Europe, 60c.); Sr. IV, The World of To-day, $1.20.

*Carter and Brentnall: Man the World Over (2 Vols.)—J. M. Dent & Sons (Canada), Ltd ..... each **.85**

*Chisholm, Stamp: Handbook of Commercial Geography—Longmans, Green & Co **7.50**

Collins New Scheme Geographies (Senior Series)—Wm. Collins Sons & Co. (Canada), Ltd.—

Africa, Asia, and the Oceans, $1.10; The Americas, $1.20; The British Empire, $1.30; The British Isles, $1.35; Europe, $1.30.

Cornish: Geography of Commerce for Canadians—Sir Isaac Pitman & Sons (Canada), Ltd ..... **.80**

*Denton and Lord: A World Geography for Canadian Schools—J. M. Dent & Sons (Canada), Ltd **1.20**

Fairgrieve and Young: Human Geographies for Secondary Schools (series)—George Philip & Son (Moyer School Supplies, Ltd.)—British Isles, $1.00; Atlantic Hemisphere, $1.10; Euro-Asia, $1.25; The World, 85c.; British Empire, 85c.; Pacific Land, 85c.

*Finch and Baker: Geography of the World's Agriculture—Government Printing Office, Washington **1.00**

*Fry: Text-Book of Geography—University Tutorial Press (The Copp Clark Co., Ltd.) **2.00**

*Geography for To-day (Series)—Longmans, Green & Co.—

Book 1, At Home and Abroad, 85c.; Book II, The Southern Continents, $1.25; British Isles and the Southern Continents, $1.00.

Hawarth and Bridewell: The World—Oxford University Press (Clarke, Irwin & Co., Ltd.) $1.75

Heaton: History of Trade and Commerce—Thomas Nelson & Sons, Ltd ..... .80

Herbertson and Hawarth: Senior Geography—Oxford University Press (Clarke, Irwin & Co., Ltd.) 1.10

MacGibbon: An introduction to Economics—Macmillan Co. of Canada, Ltd ..... .90

Michell: Elementary Economics—Sir Isaac Pitman & Sons (Canada), Ltd ..... .70

Miller: The Physical Basis of Geography—George Philip & Son (Moyer School Supplies, Ltd.) ..... .50

Morrison: A Commercial and Economic Geography—Ryerson Press ..... .80

Perrett: Man's Work and World—D. C. Heath & Co. (The Copp Clark Co., Ltd.) 1.88

"Pickles: The Southern Continents (Series)—J. M. Dent & Sons (Canada), Ltd.—

South and Central America, 65c.; Africa, 65c.; Australia and New Zealand, 65c.

Pickles: The British Isles—J. M. Dent & Sons (Canada), Ltd .75

Pickles: Modern School Geographies—J. M. Dent & Sons (Canada). Ltd.—

Europe and Asia, 75c.; Africa, Australia, and New Zealand, 75c.; Great Britain and the Modern World, 75c.

*Pitman: Common Commodities and Industries (Series)—Sir Isaac Pitman & Sons (Canada), Ltd ..... each .85

(Thirty-four titles in the series—Asbestos: Books; Carpets; Cloth; Furs; Glass; Jute; Linen; Paper; etc.)

Rambles Among Our Industries (Series)—Blackie & Son (Ryerson Press).

(Twelve titles in the series—Lime and Cement; Wool and the Weaver; Coal and the Miner; Leather and Boot Making; The Air-Man and His Craft; etc.) ..... each .45

*Stamp: A small World Geography— Longmans, Green & Co 1.35

Stembridge: World-Wide Geographies (Senior Series)—Oxford University Press (Clarke, Irwin & Co., Ltd.)—

Book V, North and South America, 80c.; Book VI, Africa, Asia, and Australasia, 90c.; Book VII, Part I, Europe, 65c., Part II, British Isles, 60c.; Book VIII, Geography of Industry and Commerce, $1.10; Americas and Australasia, 80c.; Australia and New Zealand, 35c.

Thurston: Progressive Geographies (Series)—Edward Arnold & Co. (Longmans, Green & Co.)—

Book I, The Home Region and the Homeland (The British Isles), 70c.; Book II, Africa and Australasia, 75c.; Book IIa, Britain Overseas, 85c.; Book III, America, 85c.; Book IV, Eurasia, 90c.; Book V, The World, $1.65.

Walter: In Britain To-day—Nisbet & Co., Ltd. (The Copp Clark Co., Ltd.) **$0.80**

Geography Pictures.

George G. Harrap & Co.—20 sets showing different parts of the world—Clarke, Irwin & Co., Ltd ..... per set **.45**

Conn: Regions of the world in pictures—4 sets on Africa—University of London Press (Clarke, Irwin & Co., Ltd.) ..... per set **.40**

A. and C. Black, Ltd—8 sets showing different parts of the world —Macmillan Co. of Canada, Ltd ..... per set **.65**

Periodicals.

Canadian Geographical Journal.

The Geographical Magazine (British).

National Geographic Magazine.

Geographic News Bulletins (weekly).

Geography (quarterly). Manchester. (For teachers.)